

REMARKS

Claims 1-7 and 9-19 are pending in this application after this Amendment; claims 1, 2, 4, 5, 9, 11, 12, 15, and 17 being independent. In light of the enclosed amendments and remarks, Applicants respectfully request reconsideration and withdrawal of the outstanding rejections and objections.

Official Action

In the Office Action dated March 13, 2002, the Examiner objected to the disclosure based on minor informalities; rejected claims 1 and 5 under 35 U.S.C. § 102(a) as being anticipated by *Takahashi et al.* (US 2001/0043786 A1); rejected claims 2 and 6 under 35 U.S.C. § 103(a) as being unpatentable over *Takahashi et al.* in view of *Matsumoto et al.* (USP 5,796,428); rejected claims 3 and 7 under 35 U.S.C. § 103(a) as being unpatentable over *Takahashi et al.* in view of *Kiyokawa* (USP 6,204,877); rejected claims 4 and 8 under 35 U.S.C. § 103(a) as being unpatentable over *Takahashi et al.* in view of *Kiyokawa* and further in view of *Matsumoto et al.*; and rejected claim 9 under 35 U.S.C. § 103(a) as being unpatentable over *Takahashi et al.* in view of *Matsumoto et al.*

Specification

With regard to the Examiner's objection to the disclosure based on minor informalities, by this Amendment, Applicants have amended those portions of the specification to which the Examiner objected, except for the Examiner's objection to the term "therefor", asserting it is misspelled. It is respectfully submitted that according to Random House Webster's Unabridged Dictionary, the term is properly spelled. Based

upon these amendments, it is respectfully requested that the outstanding objection to the disclosure be withdrawn.

Claim Rejections - 35 U.S.C. § 102

With regard to the Examiner's rejection of claims 1 and 5 under 35 U.S.C. § 102(a) as being anticipated by *Takahashi et al.*, Applicants respectfully traverse these rejections.

With regard to claim 1, the Examiner asserts that the *Takahashi et al.* reference teaches a wireless communication device (4) transmitting operation information to remotely control the external apparatus by causing the monitor (25) to display an image the camera transmits. Applicants disagree with the Examiner's characterization of this reference.

It is respectfully submitted that *Takahashi et al.* teaches a video camera and a recording and reproducing apparatus that communicates signals by using wireless communication techniques. Specifically, *Takahashi et al.* teaches

The monitor device 25 includes an MPU 21 for controlling the entire monitor device 25, the SS transmitting/receiving circuit 20, and a signal processing circuit 22. The signal processing circuit 22 decodes the digital video signal received by the SS transmitting/receiving circuit 20, converts it into a signal format suited to visual display on a normal display, such as an NTSC signal format, and supplies the obtained signal to a display 23.

An operating key 24 is provided for controlling the operation of the monitor device 25 and for instructing the video-camera-integrated type VTR 10 to perform various operations. The instruction information inputted from the operating key 24 is supplied to the MPU 21 as well as the SS transmitting/receiving circuit 20, and is transmitted to the video-camera-integrated type VTR 10 via the SS transmitter/receiving circuit 20. In the VTR 10, the SS transmitting/receiving circuit 4 receives the operation (instruction) information inputted from the operating key 24 and supplies it to the MPU 5 so that the MPU 5 can control the

operation of the video-camera-integrated type VTR 10. (Page 4, paras. 41 and 42).

In contrast, the present invention as set forth in claim 10 recites, *inter alia*, an electronic camera comprising a wireless communication device which transmits image data and information relating to image data for storage on an external apparatus, wherein the wireless communication device further transmits operation information corresponding with operation of the control part to the external apparatus to remotely control the external apparatus. It is respectfully submitted that in the *Takahashi et al.* reference, it is monitor 25 that controls operation of VTR 10. As such, claim 10 does not read on the *Takahashi et al.* reference.

Additionally, it is respectfully submitted that the *Takahashi et al.* reference fails to teach or suggest the control part of the present invention. The Examiner asserts *Takahashi et al.* discloses a camera comprising control parts 3 and 68.

It is respectfully submitted that *Takahashi et al.* teaches signal processing circuit 3 performing processing so that a signal indicative of the auxiliary information relative to photography is added to a video signal (para. 31, lines 19-22). Additionally, *Takahashi et al.* teaches a switch 68 through which to selectively output the video signal supplied by the image pickup element 2 or the video signal produced by the recording and reproducing part 9 to the viewfinder 16, the SS transmitting/receiving circuit 4 and an input/output terminal 12 (page 3, para. 32, lines 18-22).

In contrast, the present invention as set forth in claim 1 recites, *inter alia*, an electronic camera comprising, *inter alia*, a control part provided to the body, the control part being operated by a user wherein the wireless communication device further transmits operation information corresponding with operation of the control part to an

external apparatus to remotely control the external apparatus. It is respectfully submitted that neither the signal processing circuit 3 nor switch 68 are operated by a user. Further, neither signal processing circuit 3 nor switch 68 is used to remotely control the external apparatus. As such, it is respectfully submitted that claim 1 is not anticipated and is thus allowable over *Takahashi et al.*

It is respectfully submitted that independent claims 2, 4, 5, 9, 11, 12, 15, and 17 contain elements similar to those discussed above with regard to claim 1, and thus are allowable for the reasons set forth above with regard to claim 1. Additionally, claims dependent upon the allowable independent claims are also allowable.

Additionally, it is respectfully submitted that the *Takahashi et al.* reference cited by the Examiner does not qualify as prior art under 35 U.S.C. § 102(a). 35 U.S.C. § 102(a) provides that a person shall be entitled to a patent unless the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent. The publication date of the *Takahashi et al.* reference is November 22, 2001. The filing date of the present application is August 21, 2001. Since the reference date of November 22, 2001 does not pre-date Applicants' filing date of August 21, 2001, *Takahashi et al.* does not qualify as prior art under 35 U.S.C. § 102(a). As such, it is respectfully requested that the outstanding rejections be withdrawn.

Claim Rejections - 35 U.S.C. § 103

With regard to the Examiner's rejection of claim 9 under 35 U.S.C. § 103(a) as being unpatentable over *Takahashi et al.* in view of *Matsumoto et al.*, Applicants respectfully traverse this rejection.

It is respectfully submitted that claim 9 contains elements similar to those discussed above with regard to claim 1. As such, it is respectfully submitted that *Takahashi et al.* fails to teach the electronic camera remotely controlling the external apparatus.

It is further respectfully submitted that *Matsumoto et al.* fails to cure the deficiencies of the teachings of *Takahashi et al.*, assuming that the references can be combined, which Applicants do not admit, as *Matsumoto et al.* fails to teach the electronic camera remotely controlling the external apparatus.

As such, claim 9, and dependent claims thereon, are allowable over *Takahashi et al.* in view of *Matsumoto et al.*

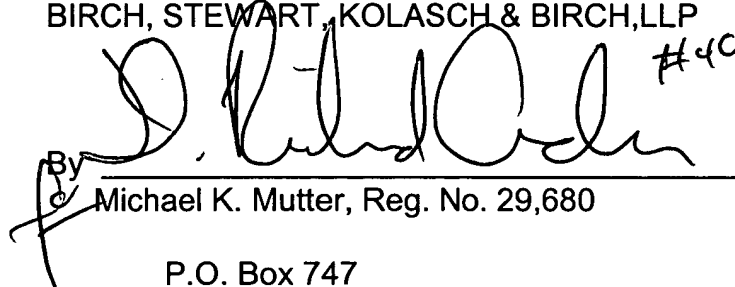
CONCLUSION

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number of (703) 205-8000, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachment: Version With Markings to Show Changes Made

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

Please replace the paragraph beginning on page 2, line 15, with the following rewritten paragraph:

–Moreover, since the wireless communication device uses a radio-wave communication method such as BLUETOOTH [Bluetooth], the restriction of the communication due to the directivity is smaller than that of the infrared communication.--

Please replace the paragraph beginning on page 4, line 10, with the following rewritten paragraph:

–Fig. 1 is a front view of a digital camera of the present embodiment. As seen from Fig. 1, a digital camera (electronic camera) 10 is provided with a taking lens 12, a finder aperture 14, a strobe 16, a strobe emission adjusting sensor 18, a self-timer LED 20, and a CCD image sensor (not shown in Fig. 1 but recited with a reference number 60 in Fig. 4) as an imaging device[, are arranged]. A reference number 21 is a grip. Although not shown in the drawings, a card slot of a memory card (recited as a reference number 82 in Fig. 4), a digital input/output terminal, a video output terminal, and a DC power source terminal, are provided to the grip 21 and to a side face of the digital camera 10 which is opposite to the grip 21. Moreover, the digital camera 10 has a function for exchanging data via a wireless communication with a faint electric wave (e.g. a communication interface for [Bluetooth]BLUETOOTH).--

Please replace the paragraph beginning on page 5, line 4, with the following rewritten paragraph:

-- At a side of the liquid crystal panel 26 for displaying characters, a strobe button 36 for switching a mode of a strobe taking and a macro button 38 [28] for setting at a close-distance taking mode (macro mode) are disposed.--

Please replace the paragraph beginning on page 5, line 24, with the following rewritten paragraph:

--[A reference] Reference numbers 40 and 42 are a shift button and a display button, respectively. The shift button 40 is a push switch for expanding a function of a key switch of the four-direction button 32 and other keys, whereas the display button 42 is an operating means for operating ON/OFF of the liquid crystal monitor 28 and switching display/non-display of a frame number and the like being reproduced.--

Please replace the paragraph beginning on page 6, line 6, with the following rewritten paragraph:

--Fig. 4 is a block diagram showing an inner structure of the digital camera 10. CPU 50 is a control part for controlling the respective circuits based on an inputted signal from an operating part 52, and performs controls such as the following[s]: controlling over display of the liquid crystal monitor 28, controlling strobe emission, auto-focus (AF) calculation, and auto-exposure (AE) calculation.--

Please replace the paragraph beginning on page 6, line 11, with the following rewritten paragraph:

--The operating part 52 is a block which includes an instruction input means such as the power source switch 24, the release button 22, the mode dial 30, and the four-direction button 32. When the power source switch is turned on, the CPU 50 transmits a command to a power source control circuit 54, and supplies electricity to the respective parts of the digital camera 10 via the power source control circuit 54 [38] from an external power source which is connected with a battery 56 or a DC power source terminal (not shown), whereby enables the respective circuits to operate. The battery may be a rechargeable battery (secondary battery) or may also be a dry cell (primary battery) on a market.--

Please replace the paragraph beginning on page 7, line 3, with the following rewritten paragraph:

--The signal outputted from the analog signal processing part 64 is converted into a digital signal by an A/D converter 66 and is added to a digital signal processing part 68, which serves as an image processing means including circuits such as a brightness/color difference signal producing circuit, a gamma correction circuit, a sharpness correction circuit, a contrast correcting circuit, and a white balance correcting circuit, and processes an image signal in accordance with a command from the CPU 50.--

Please replace the paragraph beginning on page 8, line 17, with the following rewritten paragraph:

--The digital camera 10 has a wireless communication part 84 by which image data and the respective signals can be exchanged. An EEPROM 86 stores identification data (ID data) for specifying a communication correspondence and external equipment with which the CPU 50 determines equipment to be communicated with. The CPU 50 also encodes data using encoding 88 to be transmitted by using the identification data of the communication correspondence and transmits the data from the wireless communication part 84.--

Please replace the paragraph beginning on page 8, line 23, with the following rewritten paragraph:

--Fig. 5 is a schematic view of a system which is a combination of the digital camera 10 and a personal computer 90, which comprises a body 92, a display 94, keyboard[s] 96, and a mouse 98, and which is provided with a wireless communication part 100 like the digital camera 10 and thus has a function to exchange the image data and the respective signals through the wireless communication part 100.--

Please replace the paragraph beginning on page 9, line 16, with the following rewritten paragraph:

--The PC 90 which received the data of the newly taken image from the digital camera 10 decodes the encoded data so that the image can be viewed. At the PC 90 side, the image transmitted from the digital camera 10 is classified in accordance with accessory data such as date and taking condition which are attached to the respective image data, and the image is displayed to the user by a folder display under an

assumption that the image is stored in a virtual folder with respect to the classification keys. The virtual folder display is presented to the display 94 [92] of the PC 90 or the liquid crystal monitor 28 of the digital camera 10, or both of them. Therefore, the user can quickly select a desired image to view.--

Please replace the paragraph beginning on page 10, line 28, with the following rewritten paragraph:

--Fig. 9 is a flowchart showing a process of the personal computer (PC) 90. As seen from Fig. 9, the PC 90 [request] requests a connection to the digital camera 10 (Step S910), and requests image transmitting to the digital camera 10 (Step S912) after receiving a response. When receiving the image data, the PC 90 then requests displaying the image on the screen (Step S914). When the digital camera 10 designates an image to be displayed through a remote-controlled operation, the image related to the designation is displayed on the display 94 (Step S916).--

Please replace the paragraph beginning on page 11, line 13, with the following rewritten paragraph:

--When receiving a key signal corresponding with pressing of the up key of the four-direction button 32, the PC 90 performs a process for enlarging a current image by a reproduction zoom function (Step S924). Moreover, When receiving a key signal corresponding with pressing of the down key of the four-direction button 32, the PC performs a process for reducing an image ("zoom-down process") which is enlarged and displayed (Step S926). After Steps S920, S922, S924, or S926, the process returns to

Step S916, and the displayed contents are changed. When receiving a key signal corresponding with pressing of the cancel/return button 44 ("CANCEL") at Step S918 [S928], the communication is completed (Step S928).--

Please replace the paragraph beginning on page 12, line 2, with the following rewritten paragraph:

--As described hereinabove, according to the present invention, a remote-controlled operation of an external apparatus is possible by using a wireless communication means for transmitting image data in order to transmit operation data of the operating part of the body of the camera. Therefore, the electronic camera of the present invention can seamlessly (=smoothly) perform a connective operation[s] with the external equipment, and the user can perform a variety of processes such as taking, deleting, and storing of an image, by operating the electronic camera by hand without touching the external apparatus.--

IN THE CLAIMS:

Please cancel claim 8 without prejudice or disclaimer to the subject matter contained therein.

The claims have been amended as follows:

1. (Amended) An electronic camera, comprising:
a body;

a control part provided to the body, the control part being operated by a user;
and[:]

a wireless communication device which transmits image data,

wherein the wireless communication device further transmits operation information corresponding with operation of the control part to an external apparatus to remotely control the external apparatus.

2. (Amended) An external apparatus which is remotely controlled by an [the] electronic camera [as defined in claim 1], the external apparatus comprising:

a wireless communication device which communicates with [the wireless communication device of] the electronic camera to receive image data and accessory information attached to the image data, the wireless communication device further receiving operation information corresponding with operation of a control part provided to the electronic camera, the control part being operated by a user; [and]

a [displaying device which classifies] processor configured to classify images received from the electronic camera into image groups according to the accessory information [attached to the images and displays] and create virtual folders, each of the virtual folders comprising each of the image groups; and

a displaying device which displays the virtual folders.

3. (Amended) The electronic camera as set forth in claim 1, further comprising:

a storing device that stores identification information for specifying the external apparatus;

a specifying device that specifies the external apparatus from the identification information stored in the storing device; and

an encoding device that encodes, according to the identification information, at least one of the image data and the operation information [according to the identification information].

4. (Amended) An external apparatus which is remotely controlled by an [the] electronic camera [as defined in claim 3], the external apparatus comprising:

a wireless communication device which communicates with [the wireless communication device of] the electronic camera, including receiving image data and operation information corresponding with operation of a control part provided to the electronic camera, the control part being operated by a user, at least one of the image data and the operation information being encoded according to identification information of the external apparatus; and

a decoding device that decodes, according to the identification information, the encoded data [a displaying device which classifies images] received from the electronic camera [into image groups according to accessory information attached to the images and displays virtual folders, each of the virtual folders comprising each of the image groups].

5. (Amended) An electronic camera, comprising:

a body;

a taking lens;

an imaging device which converts a light which has entered the electronic camera through the taking lens into electric signals;

a recording device which records an image captured by the imaging device in a storage medium;

a wireless communication device which transmits image data;

a control part provided to the body, the control part being operated by a user, operational directions over an external device being entered through the control part; and

an operation information outputting device which transmits, through the wireless communication device, operation information corresponding with operation of the control part to the external apparatus to remotely control the external apparatus.

6. (Amended) [An] The external apparatus [which is remotely controlled by the electronic camera] as [defined] set forth in claim 4 [5], the external apparatus further comprising:

[a wireless communication device which communicates with the wireless communication device of the electronic camera; and]

a displaying device which [classifies images received from the electronic camera into image groups according to accessory information attached to the images and displays virtual folders, each of the virtual folders comprising each of the image groups] displays the image.

7. (Amended) The electronic camera as set forth in claim 5, further comprising:

a storing device that stores identification information for specifying the external apparatus;

a specifying device that specifies the external apparatus from the identification information stored in the storing device; and

an encoding device that encodes according to the identification information, at least one of the image data and the operation information [according to the identification information].

9. (Amended) A remote-control operation system for an external apparatus, the system comprising an electronic camera and the external apparatus, wherein:

an electronic camera comprises:

a body;

a taking lens;

an imaging device which converts a light which has entered the electronic camera through the taking lens into electric signals;

a recording device which records an image captured by the imaging device in a storage medium;

a first wireless communication device which transmits image data;

a control part provided to the body, the control part being operated by a user, operational directions over the external device being entered through the control part; and

an operation information outputting device which transmits operation information corresponding with operation of the control part to the external apparatus to remotely control the external apparatus, and

the external device comprises:

a second wireless communication device which communicates with the first wireless communication device; and

a [displaying device which classifies] processor configured to classify images received from the electronic camera into image groups according to accessory information attached to the images and [displays] display virtual folders, each of the virtual folders comprising each of the image groups,

wherein the external apparatus operates according to the operation information received from the electronic camera.

New claims 10-19 have been added.